

Notice of Allowability

Application No.

10/628,472

Examiner

Jerry T. Rahl

Applicant(s)

MITOMI ET AL

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to telephone interview with Elliot Malamud on 16 March 2005.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☒ The drawings filed on 29 July 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

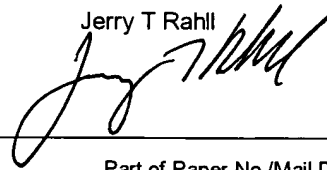
5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 3/16/05.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


AKM ENAYET ULLAH
PRIMARY EXAMINER

Jerry T Rahl



EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Elliot Malamud on 16 March 2005.

3. Claim 1 is amended to read,

“1. An optical waveguide device comprising a substrate and a supporting body for supporting said substrate, said substrate having a main body made of an electrooptic material having one main face and an other main face, an optical waveguide and an electrode provided on the side of said one main face of said main body;

wherein said supporting body is joined with said main body on the side of the other main face, said electrode comprises a feedthrough portion, and said device further comprises a low dielectric portion provided under said feedthrough portion and between the other main face of said main body and said supporting body; and

wherein said main body has a thickness of 100 micrometers or less in a region of said optical waveguide.”

4. Claim 6 is amended to read,

“6. An optical waveguide device comprising a substrate and a supporting body for supporting said substrate, said substrate having a main body made of an electrooptic material having one main face and an other main face, an optical waveguide and an electrode provided on the side of said one main face of said main body;

wherein said supporting body is joined with said main body on the side of the other main face, said electrode comprises a feedthrough portion, and said device further comprises a low dielectric portion provided under said feedthrough portion and between the other main face of said main body and said supporting body; and

wherein said low dielectric portion comprises a resin sheet between said supporting body and the other main face of said main body.”

5. Claim 10 is amended to read,

“10. An optical waveguide device comprising a substrate and a supporting body for supporting said substrate, said substrate having a main body made of an electrooptic material having one main face and an other main face, an optical waveguide and an electrode provided on the side of said one main face of said main body;

wherein said supporting body is joined with said main body on the side of the other main face, said electrode comprises a feedthrough portion, and said device further comprises a low dielectric portion provided under said feedthrough

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portion and between the other main face of said main body and said supporting body;

wherein a recess is formed on the side of the other main face of said main body; and

wherein said main body comprises a first thinner portion facing said recess and a second thinner portion facing said recess and having a thickness smaller than that of said first thinner portion, and said optical waveguide is provided in said first thinner portion.”

EXAMINER’S STATEMENT OF REASONS FOR ALLOWANCE

6. The following is an examiner’s statement of reasons for allowance. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

7. Claims 1-12 are allowed.

8. Claims 1-5, 9 and 11-12 describes an optical waveguide device having a supporting body with a main body made of electrooptic material having two main faces, where an optical waveguide and an electrode are formed on one main face of the main body, where the supporting body is joined to the main body on the side of the other main face, the electrode having a feedthrough portion and a low dielectric portion is provided under the feedthrough portion and between the other main face and the supporting body, where the main body has a thickness of 100 micrometers or less in a region of the waveguide.

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9. Claims 6-8 describe an optical device having a supporting body with a main body made of electrooptic material having two main faces, where an optical waveguide and an electrode are formed on one main face of the main body, where the supporting body is joined to the main body on the side of the other main face, the electrode having a feedthrough portion and a low dielectric portion is provided under the feedthrough portion and between the other main face and the supporting body, where the low dielectric portion comprises a resin sheet.

10. Claim 10 describes an optical device having a supporting body with a main body made of electrooptic material having two main faces, where an optical waveguide and an electrode are formed on one main face of the main body, where the supporting body is joined to the main body on the side of the other main face, the electrode having a feedthrough portion and a low dielectric portion is provided under the feedthrough portion and between the other main face and the supporting body, where a recess is formed on the side of the other main face of the main body and the main body comprises a first thinner portion facing said recess and a second thinner portion facing said recess and having a thickness smaller than that of said first thinner portion, and said optical waveguide is provided in said first thinner portion.

11. U.S. Patent No. 5,991,491 to Madabhushi describes an optical waveguide device having a supporting body with a main body made of electrooptic material having two main faces, where an optical waveguide and an electrode are formed on one main face of the main body, where the supporting body is joined to the main body on the side of the other main face, the electrode having a feedthrough portion and a low dielectric portion is provided under the feedthrough portion and between the other main face and the supporting body. Madabhushi does not describe the main body having a thickness of 100 micrometers or less in a region of the waveguide, the

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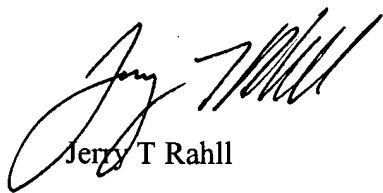
low dielectric portion comprising a resin sheet or the main body comprises a first thinner portion facing said recess and a second thinner portion facing said recess and having a thickness smaller than that of said first thinner portion, and said optical waveguide is provided in said first thinner portion.

12. U.S. Patent No. 5,991,491 to Madabhushi remains the closest prior art of record in this application. For the reasons stated above, however, Claims 1-12 herein are deemed to patentably distinguish over Madabhushi and all other prior art of record.


13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry T. Rahll whose telephone number is (571) 272-2356. The examiner can normally be reached on M-Th (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jerry T Rahll



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PRIMARY EXAMINER